

California Energy Commission
RENEWABLE ENERGY PROGRAM
Summary of Activities
April 1, 2006 – June 30, 2006

RENEWABLE ENERGY PROGRAM

The Renewable Energy Program's (REP) goal is to achieve a self-sustaining renewable energy supply for California.

Renewables Portfolio Standard Program

The Renewables Portfolio Standard program (RPS) sets goals that help inform the policies of the other programs in the REP.

Statutes require retail sellers to increase the renewable content of their electricity sales by at least 1 percent per year, with a goal of serving 20 percent of the state's retail electricity sales with renewables by 2017. California policy accelerates the target to 2010 and the Governor expanded the goal to achieving 33 percent renewables by 2020 for both investor-owned utilities and municipal utilities.¹

Renewable generators that win a contract through an investor-owned utility's competitive solicitation may be eligible for supplemental energy payments (SEPs) from the Energy Commission. Eligible new or repowered facilities priced above the market price referent (MPR) may apply for SEPs from the Energy Commission to pay the difference between the contract price and the MPR. The Energy Commission may set a cap on the amount of SEPs it issues.

- This quarter, Pacific Gas & Electric (PG&E) and San Diego Gas & Electric (SDG&E) continued to negotiate contracts with shortlisted bidders from their 2004 RPS competitive solicitations.
- PG&E, SDG&E, and Southern California Edison (SCE) continued to evaluate bids from their 2005 RPS solicitations.
- PG&E filed an advice letter for three contracts executed as a result of its 2005 RPS solicitation (Advice Letter 2827-E on May 15, 2006). The power purchase agreements (PPAs) listed below do not require supplemental energy payments.
 - 17-55 MW re-start of a geothermal facility with a 10- to 15-year contract term. The developer is US Renewables Group.
 - 5-10 MW new biomass facility with a 15-year contract term. The developer is Liberty V Biofuels.
 - 20-40 MW new biomass facility with a 10-year contract term. The developer is HFI Bio Power Project LLC.
- SDG&E continued progress on its 2004 RPS solicitation as listed below:
 - SDG&E received CPUC approval for a PPA with a 205 MW new wind project. The 20-year contract with EnXco was approved on May 27, 2006 (Resolution E-3979 for Advice Letter 1734-E filed October 27, 2005)

¹ In September 2006, Senate Bill 107 (Simitian), Chapter 464, Statutes of 2006, codified the accelerated RPS target by requiring retail sellers of electricity to increase renewable energy purchases by at least 1 percent per year with a target of 20 percent renewables by 2010.

- SDG&E requested CPUC approval of a PPA with a 20 MW new geothermal project. On May 22, 2006, SDG&E filed the Advice Letter seeking approval of the 15-year contract with Esmeralda Truckhaven LLC (Advice Letter 1795-E). The developer will be seeking SEPs from the Energy Commission.
- The Energy Commission adopted proposed changes to the RPS Eligibility Guidebook, New Renewable Facilities Program Guidebook, and the Overall Program Guidebook for the Renewable Energy Program as part of its April 26, 2006, Business Meeting. The revised Guidebooks reflect statutory, market, and regulatory developments; lessons learned; and extensive public input.

The Energy Commission had solicited comments on the November 2005 draft Guidebooks and held a Renewables Committee (Committee) workshop on December 7, 2005, to receive verbal comments. After careful consideration of written and verbal comments and additional technical and policy analysis, the Committee proposed revisions to the November 2005 draft Guidebooks. The Committee subsequently held a public workshop on April 17, 2006, to solicit comments on the proposed changes to the Guidebooks.

The RPS Eligibility Guidebook describes the eligibility requirements and the process for certifying renewable resources as eligible for California's RPS and SEPs and describes the Energy Commission's implementation of an accounting system to verify compliance with the RPS. Changes to the RPS Eligibility Guidebook include modifications and updates to address: the tracking system; incremental geothermal certification; requirements of Assembly Bill 200 (Leslie), Chapter 50, Statutes of 2005; delivery requirements; RPS decisions issued by the California Public Utilities Commission (CPUC); accounting for baseline and incremental procurement; and eligibility for biomass and mothballed facilities.

Western Renewable Energy Generation Information System (WREGIS)

The Energy Commission is working with the Western Governors' Association, state and provincial representatives, and renewable energy market participants to design and implement an accounting system to verify compliance with California's RPS by retail sellers. WREGIS, a regional renewable energy tracking and registry system, will provide WREGIS Certificates to support verification of compliance with regulatory and voluntary renewable energy programs in the Western Interconnect.

- Addendum #11 to the Request for Proposals for a System Development and Technical Operations (SD&TO) Contractor was issued on May 25, 2006.
- Final proposals to the SD&TO Contractor RFP were received on June 19, 2006. A selection is expected to be made in early fall 2006.
- The contract between the Energy Commission and the Western Electricity Coordinating Council (WECC) was delivered to WECC staff on June 26, 2006, which was then distributed to the WECC Board of Directors.
- The contract for a WREGIS Senior Project Manager was approved by the Energy Commission at the May 24, 2006 Business Meeting. The Senior Project Manager helps ensure that project objectives are realized and coordinates efforts between the Software Development and Technical Operations Contractor and program development.
- The contract for the WREGIS Program Development Project Manager was approved by the Energy Commission at the June 29, 2006 special Business Meeting. The Program Development Project Manager is responsible for working with WECC to establish the administrative operations of WREGIS at WECC.
- The WREGIS Committee, which makes WREGIS policy decisions, held conference call meetings on April 24, 2006, and May 22, 2006, and conducted an in-person meeting at the Energy Commission on June 1, 2006.
- The Energy Commission estimates that WREGIS will be operational in mid-2007.
- WREGIS disbursements are reported under its funding source, the Consumer Education Program.

Existing Renewable Facilities Program (ERFP)

This program provides production incentives of up to 1.5 cents per kilowatt-hour to biomass, solar thermal, and wind facilities. Incentive payments are tied to market prices, with no payments made if the market price is above a predetermined target price.

- During this period, about 3.4 million in payments were made for 829 GWhs of generation for April through June 2006.
- To date, payments totaling over \$230.1 million have been made to existing facilities for generation from January 1998 through June 2006.
- ERFP rollover funds — those remaining after payments have been made and rolled over to the next payment cycle as available funds — total \$35.8 million.
- 378 facilities are registered as renewable suppliers, with 103 eligible for funding from the ERFP.
- Changes to the ERFP Guidebook to maintain the current Target Price and Cap for Tier 1 biomass facilities only, from July 1, 2006 through December 31, 2006, were approved in June. The Target Price and Cap are currently scheduled to drop on July 1, 2006.

New Renewable Facilities Program (NRFP)

The NRFP fosters the development of new in-state renewable electricity generation facilities by providing financial support. The program consists of two components:

1. Production incentives (cents per kWh payments for renewable energy generated) for proposed projects were allocated to the lowest bidders during three competitive solicitation processes per SB 90. Production incentives are paid over a five-year period once a project begins electricity production.
 - Incentive payments totaling approximately \$2.37 million were made during this quarter.
 - Approximately \$119 million is encumbered for participating auction winners.
 - Forty-seven² projects are currently online and producing electricity, representing 488 megawatts of new renewable energy capacity.
 - Since its inception in June 1998, the NRFP has paid a total of over \$62 million in production incentives to 46 new renewable generating facilities for 6,561 gigawatt-hours of generation.
 - Cambrian Energy Woodville, LLC received approval of an amendment to Funding Award Agreement REN-98-033 (50044) changing the awardee's name from MM Woodville Energy, LLC to Cambrian Energy Woodville, LLC. Effective date of the name change was May 2005.
 - The Energy Commission approved a split in ownership of the Wintec Energy Ltd. Funding Award Agreement for the Wintec Energy #2 (REN-01-065, 50065) wind project. The Funding Award Agreement has been divided into #2-A and #2-B (REN-05-001, 50084), with the #2-B portion owned by Mountain View Power Partners III, LLC.
2. Production incentives, referred to as Supplemental Energy Payments (SEPs), are provided to cover above-market costs of meeting the RPS, subject to certain cost constraints. If an eligible facility secures a power purchase agreement with a retail seller through a competitive solicitation, it may apply for SEPs.
 - As of June 30, 2006, the Energy Commission had not received any complete applications for SEPs. However, staff expects to receive at least two applications in the near future, and anticipates receiving applications as a result of the 2005 and 2006 IOU RPS solicitations.

² The Wintec #2 wind project was split into two projects during this quarter, but in order to maintain consistency with previous years, it will continue to be reported as one project.

Emerging Renewables Program (ERP)

The ERP provides consumers of electricity in investor-owned utility service territories with a rebate incentive to offset the cost of purchasing and installing new renewable energy systems at their homes and businesses. Eligible technologies are solar photovoltaic, small wind, fuel cells using renewable fuels, and solar thermal electric. Incentive payments are based on the rated electrical capacity of the system.

- During this quarter, payments totaling \$32.7 million were made for 2,506 installed systems, representing over 11.5 MW of capacity.
- Approximately 4,222 reservation requests were received during this quarter, representing about 24.1 MW of capacity.
- Payments to date total \$285 million for 19,400 systems, representing approximately 81 MW of distributed generation capacity.
- Funds encumbered for 3,779 systems total \$67.9 million, representing 23.6 MW of capacity. Because the ERP can encumber funds that will be collected through 2006, and \$60 million from 2007 through 2011 (authorized by Assembly Bill 135 [Reyes], Chapter 867, Statutes of 2004), a total of \$11.9 million remains available for rebates.
- In June, ERP Guidebook revisions dropped the rebate level by 20 cents for all eligible technologies except wind (the rebate level was maintained at the January 2006 level).
- Updated public information concerning the ERP continued to be made available on the Energy Commission's website.

- Pilot Performance-Based Incentive Program (PBI)

This pilot program began in January 2005 as a possible long-term option for building the PV market in California. With a budget of \$10 million, the program offers a rebate level of \$0.50 per kWh based on the energy production of the installed solar PV system. The initial reservation period is one year to install the PV system. Quarterly performance payments are made over a three-year period.

- Nine applications remain under review, representing potentially \$2.9 million in reserved funds and approximately 1.1 MW of capacity.
- As of June 30, 2006, funds encumbered for 31 applications represent \$6.7 million and 2 MW of capacity.

- Affordable Housing Program

Solar PV systems installed on affordable housing projects and meeting defined criteria are offered rebates 25 percent higher than the standard ERP rebate, not to exceed 75 percent of the system cost.

- During this quarter, payments of \$61,402 were made to one affordable housing project.
- \$1.54 million remains reserved for 34 projects pending completion.
- The Affordable Housing Program represents 249 kW of installed renewable electrical capacity as of June 30, 2006.

- Solar Schools Program

In May 2004, the Solar Schools Program offered \$4.5 million in incentives to eligible public and charter schools for the installation of PV systems. Thirty schools were selected to receive the higher rebate – participants receive double the current ERP rebate – and awardees claim their rebate when their PV system is fully installed and operational. By June 30, 2004, the Solar Schools Program closed after all funds were awarded. The program is funded equally by the Energy Commission's Emerging Renewables Program (\$2.25 million) and the California Attorney General's Alternative Energy Retrofit Account (\$2.25 million).

- During this quarter, the program paid \$188,620 to one school resulting in 29.5 kW of installed solar capacity.

- As of June 30, 2006, 21 schools have completed their PV projects with an additional 8 schools scheduled for completion.
- Payments at the end of the quarter total \$2.76 million for approximately 441 kW of solar capacity.
- **California Solar Initiative (CSI) / New Solar Homes Partnership (NSHP)**

The CSI is a \$3.35 billion solar incentive program to be administered by the CPUC, Energy Commission, and publicly-owned utilities from 2007 through 2016. The CPUC is responsible for providing incentives to the nonresidential and existing residential markets, and the Energy Commission's NSHP will encourage solar installations in the residential new construction market within the investor-owned electric utility service areas. The CSI will replace the solar components of both the Energy Commission's ERP and the CPUC's Self-Generation Incentive Program.

 - On June 12, 2006 the Energy Commission held a Committee Workshop to receive comments on the Staff's Draft Proposal outlining the NSHP Program. Staff also presented a framework for developing incentive levels and provided an update on development of expected performance-based incentives (EPBI).
 - On June 13, 2006 a joint Energy Commission/CPUC workshop was held to receive information on the role of the affordable housing element in the NSHP and the CPUC's CSI incentive program
 - In support of the NSHP, a work authorization for \$159,806 was developed under the REP's technical support contract with KEMA to undertake outreach, PV technical analyses, and economic analysis.

Consumer Education Program

This program awards grants and contracts to increase public awareness of renewable energy and its benefits, and to help build a consumer market for renewable energy and small-scale emerging renewable technologies. Consumer Education funds are also used for tracking and verifying renewable energy purchases under the RPS (WREGIS).

- A grant agreement for \$50,000 was developed with the Rarus Institute for the Solar Decathlon 2005 project. The Solar Decathlon was a competition among 18 colleges and universities from around the globe, featuring team-designed and built solar homes, and held on the National Mall in Washington, D.C. in October 2005. The Rarus Institute was tasked with developing the educational element of the project: a video and book.
 - On April 17, 2006, the Rarus Institute submitted 6 copies of the Solar Decathlon video (DVD format).
 - In May, the Rarus Institute requested a 3-month extension due to a delay on the Solar Decathlon book completion. In addition, a draft copy of the Solar Decathlon book was submitted to the project manager. A new grant term was extended to August 30, 2006. On May 25, the Solar Decathlon video was shown at the Solar Decathlon Celebration at CalPoly San Luis Obispo. The open house celebration showcased the Solar Decathlon House. Commissioners and staff from the Energy Commission were invited to this event.
 - No invoice was received from the Rarus Institute during this quarter.
- Co-funded Energy Commission participation in the California Building Officials Education Week: Expended \$1,000.
- Enterprise Networking Solutions contract for \$193,200 for the services of a Senior Project Manager consultant for the WREGIS project: Expended \$3,737.
- Consumer Education Program payments to KEMA during this quarter consisted of the following:
 - A total of \$38,917 for activities related to development of the NSHP:

- Training activities for installers and building officials on the most efficient and proper methods to install and inspect PV systems: Expended \$4,781.
 - Development of a report identifying the sustainable solar market in California: Expended \$6,095.
 - Staff support services for the New Solar Homes Partnership including support in outreach activities, PV technical analysis, and assistance in analyzing economic issues: Expended \$28,041.
- A total of \$53,182 for the following WREGIS support activities:
 - Development of a renewable energy tracking and registry system for WREGIS: Expended \$7,676.
 - Assistance with obtaining technical expertise for successful implementation of WREGIS: Expended \$45,506.
- Consumer Education disbursements since the beginning of the program total over \$5.45 million.